

Letters to the Editor

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Can Conflict Resolution Training Increase Aggressive Behavior in Young Adolescents?

A major challenge to the field of public health today is the discovery of effective interventions to prevent interpersonal violence among young people, particularly in inner-city, poor neighborhoods. School-based conflict resolution programs are being promoted throughout the nation as a means of preventing youth violence. Our recent experiences in implementing a course in conflict resolution in a Harlem junior high school, within the context of the Harlem Hospital Injury Prevention Program, have brought to our attention the possibility that such interventions may actually promote rather than prevent aggressive behavior in young adolescents with chronically high levels of exposure to violence.

A baseline survey of four seventh-grade classes ($n = 86$ students) in the school revealed high levels of exposure to violence, with 15% of students reporting

being the victim of a stabbing and 48% having witnessed a shooting. Students from two of the classes participated in a one-semester course in conflict resolution consisting of three 38-minute sessions per week, following a curriculum developed by Alternatives to Violence Inc. This curriculum emphasizes social skill building in giving and receiving respect and empathy, active listening, identification of violent impulses in oneself, and active participation in choosing how to handle potentially violent personal situations. The goal of the course is to increase participants' awareness of their own reactions and decisions in situations of potential conflict. The assumption is that self-awareness will promote better control of one's responses and impulses when one is confronted with threatening situations.

The homeroom teachers for children in all four classrooms completed teacher versions of the Achenbach Child Behavior Checklist at the beginning and end of the semester. Two subscales within this checklist are the "internal" scale (including items on withdrawal, somatic complaints, anxiety, and depression) and the "external" scale (including items on aggression and delinquency). For confidentiality reasons, the behavior checklist scores of individual students could not be linked. Thus, the analysis of the results is restricted to a comparison of mean scores on the behavior checklist at the beginning and end of the semester in the program and comparison classrooms.

Following student participation in the program, the mean scores increased (indicating increased problems) by 91% (from 3.96 to 7.56) on the internal scale and by 55% (from 10.64 to 16.46) on the external behavior scale in the two classes exposed to the program. During the same time period, the scores declined in the comparison classes by 17% (from 8.60 to

7.16) and 15% (from 22.42 to 19.16), respectively, on these scales.

These data corroborate our impressions, after working with the students, that children in the seventh grade who are currently exposed to high levels of violence will not necessarily derive the intended benefits from a conflict resolution curriculum and that their participation in such a course may actually promote aggressive behavior and anxiety. It is possible that, by seventh grade, students in this setting have well-developed defenses allowing them to cope with routine exposures to violence and that the conflict resolution program disrupted their acquired coping skills, causing increased anxiety and aggression. It is also possible that the school environment and the brief time allotted for each session were not conducive to open and honest exchange of participants' experiences with interpersonal violence. Such exchange is considered a precondition for the program's intended benefits.

On the basis of our experiences, we urge promoters of school-based conflict resolution programs to proceed cautiously and with careful evaluation of both short- and long-term effects on children at various stages of development and in various settings. □

Ellen Colyer, MSW

Theresa Thompkins

Maureen Durkin, PhD, DrPH

Barbara Barlow, MD, MA

Ellen Colyer, Theresa Thompkins, and Barbara Barlow are with the Harlem Hospital Injury Prevention Program, Division of Pediatric Surgery, Harlem Hospital Center, New York, NY. Maureen Durkin is with the Harlem Center for Health Promotion and Disease Prevention, Columbia School of Public Health, New York, NY.

Requests for reprints should be sent to Barbara Barlow, MD, MA, Pediatric Surgery, Harlem Hospital MLK 17103, 506 Lenox Ave, New York, NY 10037.

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The Future of Epidemiology: A Humanist Response

In their papers on epidemiology and the humanities,^{1,2} Weed and Oppenheimer bemoan the fact that epidemiology is "a biomedical science . . . technology-bound, depersonalized, and out of touch with the people it serves."^{2(p918)} Both authors hope that epidemiology can reclaim its lost soul by looking to the humanities—ethics, history, philosophy, literature—for "new paradigms."

We want to confirm Weed's and Oppenheimer's insights from the humanistic point of view of a rhetorician and a health educator who have observed public health practice for several years. From this perspective, epidemiology is only half a discipline. Epidemiology exists "to understand, prevent, and control" disease.^{2(p918)} The controlled clinical model of research, so dominant in the field, is crucial to the first of these functions, the understanding of disease: its etiology, mechanisms of transmission, physical effects, and so on. Unfortunately, epidemiologists routinely extend the controlled clinical model to prevention and control, to those parts of the discipline concerned with behavior and motivation. As a result, the discipline frames behavior in ways that keep it from asking the most important questions.

Of course, countless health professionals study the behavioral component of disease. But their investigative protocols routinely omit the most important determinant of human behavior: meaning, the way in which people interpret their health-related behaviors. Meaning is difficult to quantify, so the controlled clinical model has great difficulty accommodating it. Yet epidemiologists continue to apply the model to issues that are contingent on interpretation and thus difficult to generalize beyond a specific setting. Many studies focus, for example, on the percentages of people in a target group who respond to a particular public health intervention; however, we seldom hear why people respond as they do, about the ways target group members interpret the intervention, its sources, or the target behaviors themselves.

Currently, epidemiologists are unable or unwilling to address questions of meaning. Humanists can help them to develop the means to do so; however, for that kind of cooperation to work, epidemiology will indeed have to move toward a new paradigm. Such a paradigm will require the discipline to subordinate its drive to generalize, often inappropriately, and instead enhance public health's sensitivity to the values and interpretive strategies of particular communities. □

John Lawson, PhD
Jerald Floyd, EdD

The authors are with the Office for Health Promotion, Northern Illinois University, DeKalb, Ill.

Requests for reprints should be sent to John Lawson, PhD, Office for Health Promotion, Northern Illinois University, DeKalb, IL 60115-2854.

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Weed Responds

Lawson and Floyd¹ bring to our attention a set of interrelated claims about the relevance of meaning in an epidemiologic practice sensitive to humanistic concerns.² First, they claim that epidemiologists routinely avoid, by ignorance or design, measurements of meaning, including measurements of "why people respond as they do [to a particular public health intervention]." Second, they claim that part of the problem is methodological; that is, epidemiologists could measure meaning if they did not so readily apply the controlled clinical trial model to behavioral issues. Finally, they claim that epidemiologists not only make inappropriate generalizations but also are overzealous in their drive to generalize. Lawson and Floyd conclude that a new paradigm is needed in epidemiology.

I agree that the issue of meaning and its relevance to epidemiologic method and public health practice deserve more attention, although my experience in one aspect of prevention and control leads me to wonder whether the problems are as widespread as Lawson and Floyd suggest. In cancer prevention and control, there has been considerable interest in why women do not get mammograms,³⁻⁵ why minority populations sometimes do not

participate in cancer prevention and treatment trials,⁶ which methods smokers prefer for assistance with cessation,⁷ and the methods actually used to quit smoking.^{8,9} These topics appear to be in line with Lawson and Floyd's characterization of "meaning," although these authors may have other types of studies in mind. It is hard to tell given that they offer no examples and no methodologic alternatives.

Nor do they offer examples of inappropriate generalizations. Indeed, I am not clear if by "inappropriate" they mean unethical, ineffective, unappreciated, or scientifically unsubstantiated. Nevertheless, I agree that generalizability has been understudied in epidemiology, both as a theoretical construct and as a practical goal. Striking the right balance between etiologic hypotheses and preventive interventions requires attention to issues lumped under the linked categories of "meaning" and "behavior," to ethics, and to biologic susceptibility and other scientific concepts in molecular and genetic epidemiology, not the least of which is the strength of the scientific evidence itself. The recent meeting of the American College of Epidemiology, which featured such topics as the interface between behavioral and molecular epidemiology, suggests that perhaps the paradigm shift Lawson and Floyd recommend is at least partly under way. □

Douglas L. Weed, MD, PhD

The author is with the Preventive Oncology Branch, National Cancer Institute, Bethesda, Md.

Requests for reprints should be sent to Douglas L. Weed, MD, PhD, National Cancer Institute, EPS T-41, 9000 Rockville Pike, Bethesda, MD 20892.

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